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Review of the More Important Activities During the Fiscal Year Ended June 30, 1931

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STATISTICAL

An increase has been noted in the annual number of voluntary admissions to the hospital. The apparent hesitancy on the part of many physicians in insisting on segregation of their leper patients by formal public procedure and the gradual dissemination of optimistic information among the laity are leading toward a system of admission of individual patients by persuasion rather than by coercion. There exists a legal right to enforce segregation of lepers; but the individual so segregated is sometimes discontented and non-cooperative and, unless he quickly adapts himself to hospitalization, he may choose to absent himself without permission. It is significant that the number of patients absent without official leave has yearly diminished to a negligible percentage at the present time.

During the fiscal year ended June 30, 1931, 117,608 days of relief were furnished. The average daily population was 322, but the actual population progressively increased until, at the end of the year, a maximum of 337 was reached. Sixty-three new patients were admitted; 3 patients absconded, 1 of whom returned within a month at his own expense; 9 patients who had absconded in previous years returned for hospitalization, 5 of them paying their own expenses; 1 patient was deported as not entitled to hospitalization at the expense of the Government; 1 was discharged after a period of observation, the diagnosis of leprosy not having been confirmed; 23 died; 2 paroled patients returned with leprosy symptoms recurring; and 7 paroled patients were admitted temporarily for surgical or medical assistance required for the relief of symptoms only secondarily related to their former leprosy. Of the 19 patients paroled, all but one left the hospital.

Nativity of patients in hospital

Alabama.....	4	Hawaiian Territory..	11	Panama.....	1
Arkansas.....	1	Indiana.....	1	Poland.....	1
Bahama Islands.....	2	India.....	2	Pennsylvania.....	1
Bermuda Islands.....	2	Italy.....	10	Philippines.....	11
Brazil.....	1	Jamaica.....	2	Porto Rico.....	8
British Guiana.....	3	Japan.....	1	Portugal.....	2
British West Indies..	4	Louisiana.....	98	Rhode Island.....	1
California.....	8	Maryland.....	1	Russia.....	5
Canada.....	2	Mexico.....	41	Society Islands.....	1
Cape Verde Islands..	1	Mississippi.....	3	South Carolina.....	2
China.....	15	Missouri.....	2	Spain.....	6
Colorado.....	1	Minnesota.....	1	Texas.....	34
Dutch Guiana.....	2	New Jersey.....	1	Virgin Islands.....	1
Finland.....	1	New York.....	2	Virginia.....	1
Florida.....	14	Norway.....	1	West Indies.....	1
France.....	1	North Carolina.....	1	Wisconsin.....	2
Georgia.....	4	Ohio.....	2		
Greece.....	12	Palestine.....	1	Total.....	337

Admissions July 1, 1930-June 30, 1931, by State or country

Alabama.....	1	Florida.....	3	Philippine Islands...	8
British West Indies..	3	Georgia.....	1	Porto Rico.....	2
British Guiana.....	1	Hawaiian Territory..	2	Poland.....	1
Canada.....	1	Italy.....	2	South Carolina.....	2
California.....	3	Louisiana.....	9	Texas.....	10
China.....	1	Mexico.....	8	Virgin Islands.....	1
Colorado.....	1	Norway.....	1		
Dutch Guiana.....	1	Ohio.....	1	Total.....	63

There were 23 deaths during the year, of which number 1 was from tuberculosis (miliary); 2 from hemorrhage (gastric); 10 from nephritis; 4 from pneumonia; 4 from leprosy; 1 from diabetes mellitus; and 1 from myocarditis.

LEPRA THERAPY

During the year, 251 patients were admitted to the men's infirmary, a number considerably in excess of that for any previous year. This increase is in part due to the increased population. In the women's infirmary, 90 were admitted.

The patients admitted to the 2 infirmaries were discharged to their quarters after an average of 2 weeks, although a number remained as long as 6 months.

Of the 337 patients in the hospital proper on June 30, 1931, 178 were taking chaulmoogra oil by mouth, the dosage varying from 5 to 125 drops three times a day. About one-third of the patients were taking chaulmoogra oil with benzocaine by intramuscular injection twice weekly, the average dose being 5 cubic centimeters.

A survey made of the 180 patients who have been taking chaulmoogra oil-benzocaine intramuscularly shows that of the 49 who have

taken the treatment for 2 years, 33 were markedly improved, 14 were moderately improved, and 2 were slightly improved. Of 131 patients who have taken treatment for over 12 months, 66 showed marked improvement, 50 showed moderate improvement, 8 showed slight improvement, and 7 were unchanged, while 34 of the 2 groups were bacterioscopically negative. Graduations of clinical improvement from slight to marked have been noted in 96 per cent of these cases.

During the year all leper patients were given antityphoid immunization. This gave an opportunity for comparison of reactions in lepers with those of nonleperous persons, since all the personnel on the station were immunized at the same time. Of 300 lepers receiving 3 immunizing doses, 22 per cent gave no local or general symptoms following any injection, and of 253 nonlepers, 20 per cent were likewise negative. These reaction effects on lepers as compared with smallpox vaccination indicate much less sensitiveness to the typhoid.

The experimental use of para-thio cresol as a cell growth stimulant in treatment of leprous ulcers was attended with moderate success only.

Of the small group of patients which had been receiving intramuscular injections of vaccinated calf serum, four have continued faithfully for over two years. While three of these are at present negative bacteriologically and all show clinical improvement, no conclusion of specific effect can be made. In these, the serum finally failed to give local reaction to the intramuscular injection, but when given intradermally marked reaction was noted. Similar retention of skin susceptibility with other serums and vaccines has been mentioned in medical literature.

Other medical attention.—In the out-patient clinic, which provides treatment for nonleprous personnel and their families resident on the station, 1,272 patients received attention; relief was furnished to 1,870.

DERMATOLOGIC SERVICE

During the fiscal year there has occurred among the patients about the usual number of intercurrent skin diseases. The most interesting of these were fungal infections, some of which closely simulated macular leprosy and were found in patients on admission. In one case of infection by *Tinea versicolor* and another by *Tinea circinata* the patients regarded the lesions of these fungi as part of their leprous manifestations and stated that they had been so informed by the physicians who examined them at the time the diagnosis of leprosy was made. A sufficient amount of material has accumulated to warrant the publication some time in the future of a photographic study of such unusual cases.

Forty-eight patients were treated with the ethyl esters of the hydno-carpus, which has, in a large measure, supplanted treatment with the ethyl esters of chaulmoogra oil. Intramuscular injections of the esters in doses of 2 or 3 cubic centimeters were given once a week. Administered in this way the esters apparently are not as irritating as are those of chaulmoogra oil. Pain or tenderness on pressure and induration and swelling in the muscles have been of very rare occurrence. It has not been necessary to interrupt the weekly injections on account of soreness, and no abscesses have occurred. Beneficial results have not been spectacular, but have about equaled those obtained with the ethyl esters of chaulmoogra oil.

Of the 48 cases, 8 patients received less than 8 injections and should not be regarded as evidence as to the effect of the treatment on leprosy. Of the remaining 40 cases, 27 were of the mixed type, 8 were of the skin type, and 5 were of the nerve type. Thirteen were in the early stages of the disease and 27 presented symptoms of advanced leprosy.

Of the 40 cases, 2 have become bacteriologically negative and have been paroled and 16 have shown improvement in degrees varying from slight to marked. In 11 patients no change was noted in symptoms, 10 cases during treatment appear to have grown worse, and 1 has died.

The 2 cases paroled were of the nerve type. Of the 16 patients showing improvement, 12 were of the mixed type, 3 of the skin type and 1 was of the nerve type. Of the 11 cases in which there was no apparent change, 8 were of the mixed type, 1 was of the skin type, and 2 were of the nerve type. Of the 10 cases in which an aggravation of the symptoms were noted 6 were of the mixed type and 4 of the nerve type.

Of the two paroled cases, one was in the early and the other in the advanced stage of leprosy. Of the 16 cases showing improvement, 6 were in the early stages and 10 in the advanced. Of the 14 cases that remained unchanged, 2 were in the early and 12 in the advanced stage. Of the 7 cases that grew worse, 2 were in the early and 5 in the advanced stage. In the one case in which death occurred, the cause was pneumonia and could not be attributed to the treatment.

It would not appear from the percentages that type or stage of the disease had any important bearing on the results of treatment. The percentage of patients in the early stage of the disease in whom improvement occurred was about 50 per cent and the percentage of patients in the advanced stage in whom improvement occurred was also about 50 per cent. The percentage of those who grew worse was between 20 and 25 per cent whether the patient was in the early or advanced stage. But in those remaining unchanged there was a higher percentage in advanced than in the early stages. It would

seem from these percentages that the ethyl esters had no greater specific action in the early than it had in the later stages of the disease.

Percentages showing the improvement in the different types of the disease would not, in the cases treated, be of any value, because a large number of these cases showed symptoms of both types of the disease and the attempt at classification according to type was of necessity unsatisfactory because based on a greater or less preponderance of the symptoms of one type over the other rather than a clear cut differentiation into pure types of either nerve or skin leprosy.

In regard to the total number of patients (2 out of 48) that became bacteriologically negative during the time the esters were administered, there is no great discrepancy in percentages as compared to the percentages of patients paroled during the same time after treatments by other methods. In those cases in which increase in the severity of symptoms was noted, the treatment could not be regarded as the cause of retrogression, as the majority of these patients were not progressing favorably at the time of inception of treatment. Leprous reactions of a generalized character accompanied by fever and exacerbations of leprosy symptoms in nerve or skin were not more frequent than might be expected in untreated cases and local reactions consisted only of slight and transient soreness at the seat of injection.

An analysis was attempted of the nodular manifestations of skin leprosy with reference to diagnostic characteristics. This study illustrated with photographs of typical cases was published during the year.

EYE, EAR, NOSE, AND THROAT SERVICE

In May, 1930, the previously existing eye department was enlarged in scope to include ear, nose, and throat, in the hope that added specialistic care might not only relieve some of the existing disorders, but, by prophylaxis, prevent or delay extensions into these fields. The new facilities were received most enthusiastically by almost the entire patient body, as evidenced by the fact that 120,000 treatments were given by the department during the year. The consulting specialist on his weekly visits made a total of 10,000 examinations, an average of 193 patients weekly, refracting patients and furnishing glasses when needed as well as performing 100 operations.

NEUROPSYCHIATRIC SERVICE

During the year there were examined 68 new patients ranging in age from 10 to 68 years, 19 females and 49 males of various nationalities. Ninety-three patients previously seen sought advice and

treatment for neurological manifestations, the most frequent of which were nerve pains and paralyses. There was a total of nearly 300 consultations.

Seventeen patients, candidates for parole, were examined. While in all of these the arrest of the disease was quite apparent, some few led the group by the complete disappearance of previously intensive neurological disturbances.

The general mental attitude of the patients toward the necessity for institutional care has changed considerably for the better. One of the main contributory factors may be the encouragement brought about by the paroling of a considerable number of patients during the past few years. Mental depression is now infrequent, while a general state of hopefulness prevails.

Of the psychotic group, three have shown marked improvement. There were five patients in the psychopathic ward at the close of the fiscal year.

A patient in an advanced mixed type of leprosy developed a unilateral musculo-spiral paralysis with pressure as cause. He recovered complete use of hand within six weeks.

ORTHOPEDIC SERVICE

In the past it has been the custom to use operative procedure for the eradication of necrotic conditions both of the bones and the soft parts. In many cases such procedure necessarily produced, to a certain extent, mutilations or contractions of the part involved, and materially reduced its function, thereby more decidedly hampering the individual especially if the part affected was in the hands or feet. During the past two years it has appeared advisable to attempt palliative measures in taking care of these necrotic conditions and to resort only to operative procedure when other treatment failed. This has resulted in the reduction in the number of operations, and the continued use of hot hypertonic salt solution and hot saturated boracic-acid solution as soaks and of wet compresses has proved extremely valuable in obviating the necessity of operation in these cases. The most serious and persistent obstacle to the use of palliative treatment is pressure and weight bearing, and it is often difficult to get a patient to abstain from using the part affected; it is absolutely necessary to prohibit any function of the part that produces pressure, as pressure only increases trauma, prolongs the condition, and reduces the efficiency of the treatment to a minimum.

Nerve pains greatly incapacitate some patients, and when persistent, lower their morale considerably. Though such conditions are not strictly orthopedic in nature they may lead to deformities, and so they are referred to the physiotherapy department for treatment. The application of the infra-red ray, and bipiate diathermy applications

as near as possible over the area affected has produced gratifying results; these conditions continue to be relieved by such measures, and contraction deformities of the hands and fingers are thus prevented in many instances.

Patients who have had nerve pains once and have been relieved often apply to the department for treatment, even before they have been referred by the officer in charge of their case, as soon as they feel that there might be a recurrence.

Contraction deformities of the hands and fingers are disabling, especially when complicated with anesthesia, and patients with such conditions often have to use both hands to open a door or lift a cup or glass to the mouth. They consequently sustain burns and abrasions of the hands and develop a greater loss of function, and subsequent atrophy of muscles and bone occurs. In anticipating the establishment of these conditions many patients are treated with the idea of prevention. If contractions have already occurred when the case is admitted, they are immediately treated with contrast baths, massage, and active and passive exercises with the hope of correcting the deformity or at least preventing further deformity. In all such cases, as correction or arrestment of the deformity occurs, there is an increase in the muscular action and tone and a decrease in atrophy of the soft parts and bone. The use of light splints to aid in the correction of deformities, though efficient when used, has not proved satisfactory to patients, as their use interferes with recreation in many instances and they decline to have them applied.

Anesthetic extremities continue to be of especial interest in that they may develop contraction deformities of a progressive nature, and also because they present difficulties to treatment. Since anesthesia exists in such cases, the problem of determining just how much treatment may be given in each special case demands a close study of that particular individual; possessing a lowered local resistance, they may develop complicating lesions if a too strenuous procedure is used; also because of the loss of sensation, they often develop trauma of one sort or another, and treatment of the deformity is necessarily interrupted. With the procedure used at present, anesthesia of the fingers, hands, and feet continues to improve, and in some instances has been completely relieved. These cases are treated with contrast baths, massage, radiant light, and exercises.

Congenital deformities, unlike acquired deformities, are rarely encountered in leprosy, and for that reason the mention of a bilateral congenital clubfoot is here made. A patient, a man aged 37, was admitted to the hospital early in 1931 presenting an extreme type of bilateral talipes equinovarus congenita; he walked on the extero-dorsal aspect of each foot, with the toes pointing to the opposite knee, and for years had been forced to have his shoes specially made. An

operation was performed, the left foot being selected; and now, though still wearing the cast, the patient is able to walk with the foot practically straight. A second operation should completely straighten the foot. Later the other foot will be operated on.

DENTAL SERVICE

Eighty-one new and readmitted patients hospitalized received dental examinations; 20 showed symptoms of early or advanced pyorrhea alveolaris, with considerable bone resorption. Symptoms of Vincent's angina occurred in three patients; and in three examined, lepromata were present lingually on the gum margin of the anterior teeth, with ulceration of the soft palate.

In two advanced cases of nerve leprosy, there was complete loss of sensation on the mucous membrane of right and left cheek. Two patients examined showed complete perforation of bone in the region of the hard palate, and in another the soft tissues of the palatine velum were perforated. All three patients, however, had positive Wassermanns.

Dental routine has consisted principally of prophylaxis, treatment of pyorrhea alveolaris, extractions, prosthetic and operative dentistry, crown and bridge work, and miscellaneous treatments.

Because of facial deformities from paralyses and other pathological conditions of the mouth and adjacent tissues, normal facial expression is very difficult to restore. However, 81 dentures were being worn by patients at the close of the fiscal year.

LABORATORY SERVICE

One thousand one hundred and four persons were examined bacterioscopically for *Mycobacterium leprae*; these included patients in the hospital, former patients who had been paroled, and nonresident applicants for diagnosis. Of 785 bacterioscopic examinations made of patients in the hospital, 481, or 61 per cent, were negative.

A clinical photograph was made of each patient on admission and subsequently as often as clinical changes warranted; and these photographs were filed in the patients' clinical folders and kept as a permanent record of their physical condition. During the year 620 such photographs were made.

The cultivation of acid-fast microorganisms from lepers has been reported by many workers; while others using similar techniques have frequently failed to obtain cultures, demonstrating that culture media and technique suitable for routine work in this field have not been found. Endeavoring to find satisfactory media for artificial cultivation of these organisms, several kinds of media have been used, including modifications of egg mixtures, protein combinations, sugar

combinations, and media prepared from tissues showing marked leprous pathology. These were inoculated with materials from active leprous lesions and incubated in the presence of carbon dioxide, in the presence of oxygen, and in tubes sealed with rubber corks, both at 37° C. and at room temperature. Some encouraging results were obtained, but definite conclusions can not, as yet, be drawn.

Complete autopsies, except brain and spinal cord and these in some cases, were performed on 10 patients dying in this hospital.

Records were made of gross pathologic findings. Sections of all important organs, of some nerve trunks, and of the skin were removed, prepared, stained, and studied microscopically for histologic changes and for presence of microorganisms. These findings were recorded and with the gross pathologic records were filed in the patients' clinical record.

The sera of all new patients admitted are examined by the Kolmer quantitative complement fixation method and Kahn's precipitation test. Patients who are receiving antisyphilitic treatments are also similarly tested from time to time.

Of the 110 examinations made by each method during the year, 49 sera were negative by both Kolmer and Kahn methods; 24 were negative by Kolmer and positive by Kahn, 10 of which showed a 3-plus or higher reading by Kahn method; and 6 were negative by Kahn and positive by Kolmer, all but 3 of which, however, showed a weakly positive reading by Kolmer's method, and of these 2 were read as positive while the other was strongly positive.

Of the 9 sera that were very strongly positive by Kolmer, 5 were 4+, 3 were 3+, and 1 was 2+ by the Kahn method. Of the 7 sera that were strongly positive by Kolmer, 3 were 4+, 1 was 3+, 1 was 2+, and 2 were 1+ by Kahn. Of the 7 sera that were positive by Kolmer, 4 were 4+, 1 was 3+, and 2 were negative by Kahn. Of the 9 sera that were weakly positive by Kolmer, 4 were 4+, 1 was 3+ and 3 were negative by Kolmer. Of the 5 sera that were anticomplementary by Kolmer, 2 were 4+, 1 was ± and 2 were negative by Kahn.

A phenomenon sometimes spoken of as zoning, partial or complete hemolysis in tubes of larger quantities of sera with less hemolysis or even complete inhibition of hemolysis in the tubes with less serum, as for example - 2431 -, 12443 -, etc., was noted in 19 of the 110 sera of lepers analyzed by Kolmer's method, demonstrating the sources of error that might have occurred in the 1 or even 2 tube method of Wassermann tests.

The greater part of the current work with respect to blood chemistry has been devoted to research. Two hundred and eighty-two determinations for total calcium, 277 for diffusible calcium, 282 for inorganic

phosphorus, and 212 erythrocyte sedimentation tests were made on 54 patients taking viosterol, and on a series of patients carried as controls who showed a deficiency in diffusible calcium.

Sixty-five serum albumen and 65 serum globulin analyses were made in connection with the calcium and phosphorus, and it was found that apparent changes occurred in the albumen-globulin ratios in the blood sera of many cases, especially those showing marked reductions of diffusible calcium.¹

During the year the basal metabolism rate was studied on 53 patients, totaling 104 determinations. Some deviations from the normal were noted; but definite conclusions could not be drawn from the small series of cases, and the study is being continued.

Blood sugar analysis has been done routinely on leprosy diabetic patients taking insulin, 242 analyses being made during the year.

A study of the CO₂ combining power and the hydrogen ion concentrations of the blood of the patients is being made. This work was only recently begun and not sufficient time has elapsed to warrant drawing any conclusions.

In an effort to find an agent that would correct the errors of calcium metabolism in leprosy, 54 patients who were showing bone absorption and had low diffusible calcium were given viosterol 250 D during the past year and their blood sera were analyzed about every three months for total calcium, diffusible calcium, and phosphorus, and the erythrocyte sedimentation time was recorded.²

A study of the effect of various combinations of yeast, some with and others without the addition of sugars, has been made on a series of about 15 leprosy patients. Results of this treatment are inconclusive as yet and the experiment is being continued.

A series of eight patients whose feces contained putrefactive bacteria in high dilutions, demonstrated by culture on Kolman's cooked-meat media, were treated with dihydranol (2-4 dihydroxyphenyl n-heptane) obtained through the courtesy of Dr. Paul McIlhenny. The number of patients is not large enough to justify definite conclusions, but some of them have shown improvement in some of their acute clinical manifestations of leprosy changes. This experiment is being continued.

Seventeen patients continued to take smallpox virus intradermally and subcutaneously biweekly, and 719 injections were given to this group during the year. Though this treatment can not be considered a specific for leprosy, several of these patients have shown marked amelioration of symptoms while taking it.

¹ See Public Health Reports, vol. 47, No. 7, Feb. 12, 1932.

² A report of this work is expected to be ready for publication in 1932.

X-RAY SERVICE

The X-ray department is constantly revealing new and grotesque pictures of processes involving both bone and soft tissue. Adequate research, it is hoped, will help in the interpretation of these lesions.

NURSING SERVICE

The nursing service this year, as contrasted with previous years, shows a large increase in the admittances to both male and female infirmaries. The special condition which brought about this large hospitalization was a severe and prolonged epidemic of erysipeloid leprous reaction. The specificity of this epidemic is demonstrated by the fact that only the leprous were affected, notwithstanding the close and prolonged contact to which the nursing and medical staff were subjected.

It is interesting to note the vast improvement in the general morale of the patients since the introduction of certain additional recreational procedures. The keen competition seems to accelerate both physical and mental functions, broadens views, decreases discontent, and tends to abolish that hand-to-mouth mentality which is so conspicuous in chronic illness.

The different nursing departments are coordinating splendidly. The ear, nose, and throat treatments continue to aggregate approximately 10,000 monthly. The physiotherapy department is equally active, giving approximately 7,000 treatments monthly, including the different modalities. The work in the male and female surgical clinics is particularly heavy, frequent changes of dressing being imperative to maintain personal and general hygiene and to prevent accidental infections. The average monthly dressings number about 8,000.

An interesting item of importance is the work done in the pharmacy. Besides the general daily supplies issued, 14,000 prescriptions were compounded during the year, and 240,000 capsules of different preparations of chaulmoogra oil were filled and distributed.

The interest in occupational therapy seems to be lagging. This is due mostly to the ill effects upon the hands caused by minor injuries sustained while manipulating rough materials.

DIETETIC SERVICE

The expansion of the dietetic department, including a kitchen, a cafeteria, cold storage, and subsistence storehouse, adequately provides for the peculiar dietary problems met with here.

Since it is generally conceded that hotel cooking is superior to that of hospitals, the services of a first-class hotel chef were secured. He operates the patients' kitchen as though his clientele were not patients but patrons. A wide range of culinary tastes must be satisfied, since the patients come not only from every section of the United States,

but also from many foreign countries. Approximately two-thirds of the patients are served in the cafeteria. The breakfast menu serves as an illustration of the variety of food offered daily:

Fruit: Varies daily.

Three hot cooked cereals: Grits, oatmeal, and cream of wheat.

Choice of prepared cereals: Cornflakes, grapeanuts, puffed rice.

Meat: Varies daily.

Eggs: Fried, hard boiled, soft boiled.

Toast, bread and butter.

Hot and cold milk, coffee, tea, and cocoa.

Patients unable to go to the cafeteria are offered an even wider choice of foods. To each of these patients is given, 24 hours in advance, a copy of the day's menu. The patient checks on the menu what he wishes served, and has the further privilege of substituting articles which appeal to his appetite instead of those regularly served. After the bill of fare has been checked and signed by the patient, it is placed on his tray, which is served accordingly. This system involves very little labor or additional cost and is more than compensated for by the increase in satisfaction.

LAUNDRY SERVICE

From time to time, cost analyses are made of department or project activities to correct or justify apparently abnormal expenditures. During the year a thorough analysis of the administration of the hospital laundry was undertaken.

The laundry in this hospital is vastly different from that in most other hospitals, since the patients in this institution are here for years, if not for life, and the Government assumes the obligation of complete care of the patient. A part of this complete care must necessarily consist of all laundry, and here laundry includes all wearing apparel from underclothes to overcoat. No small amount of the laundry consists in the appropriate washing of sweaters, and the cleaning and pressing of coats, vests, trousers, overalls, etc. This involves many operations and much work not necessary at other hospitals. The quality of the work compares favorably with that of the local commercial laundries.

Comment is not infrequently made in this hospital on the good morale and the general appearance of the patients, as the result of their having a supply of clean linen in their rooms and clean wearing apparel. No doubt a considerable financial saving might be effected by restricting the washing of patients' effects to bed linen, pajamas, and night gowns. It is thought, however, that this would be a false economy and that the personal morale would suffer with the resulting uncleanness, if each patient were required to assume responsibility for the washing of his linen.

FARM AND DAIRY

Experience of recent years has shown that general truck farming on the station is not economical, because the costs based on an 8-hour day greatly exceed the production costs of local truck farmers who work from sunrise to sunset and can commandeer free family labor. Consequently, aside from certain limited crops, the available farm land has been used for pasturage and for forage crops. Field corn and soy beans have been planted in the lowlands in sufficient quantity to fill two new silos, and alfalfa is being grown in considerable quantity.

The dairy stock, consisting of 61 milch cows, five bulls, and 27 calves, is thoroughbred and is an accredited, tuberculosis-tested herd. A total of 48,831 gallons of milk was produced during the year. Had this quantity of milk been purchased in the market, the additional expense to the hospital would have been approximately \$6,500.

TALKING PICTURES

During the early part of the fiscal year, funds became available, through the efforts of the What Cheer Club (a social organization composed of patients), to install sound reproducing equipment in the recreation hall. Accordingly, contracts for silent moving pictures were canceled and on November 3, 1930, the first regular "talkie" was shown.

COURT DECISION RELATING TO PUBLIC HEALTH

Harrison Antinarcotic Act construed—(U. S. Supreme Court; *Blockburger v. United States*, 52 S. Ct. 180; decided Jan. 4, 1932.) Sections 1 and 2 of the Harrison Antinarcotic Act (U. S. Code, title 26, secs. 692, 696) read, in part, as follows:

It shall be unlawful for any person to purchase, sell, dispense, or distribute any of the aforesaid drugs [opium and other narcotics] except in the original stamped package or from the original stamped package; * * *

It shall be unlawful for any person to sell, barter, exchange, or give away any of the drugs specified in section 691 of this title except in pursuance of a written order of the person to whom such article is sold, bartered, exchanged, or given on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue.

The defendant in the trial court was convicted on three counts of violating the above provisions. Each of the counts charged a sale of morphine hydrochloride to the same purchaser. One count charged a sale on a specified day of 10 grains of the drug not in or from the original stamped package, another charged a sale on the following day of 8 grains of the drug not in or from the original stamped package, and the last charged the latter sale also as not having been made in pursuance of the purchaser's written order.

From the evidence it appeared that, shortly after delivery of the drug which was the subject of the first sale, the purchaser paid for an additional quantity which was delivered the next day. The defendant contended that these two sales, having been made to the same purchaser and following each other with no substantial interval of time between the delivery of the drug in the first transaction and the payment for the second quantity sold, constituted a single continuing offense. In holding this contention to be unsound, the Supreme Court stated, in part, as follows:

* * * But the first sale had been consummated and the payment for the additional drug, however closely following, was the initiation of a separate and distinct sale completed by its delivery.

* * * * *

The narcotic act does not create the offense of engaging in the business of selling the forbidden drugs, but penalizes any sale made in the absence of either of the qualifying requirements set forth. Each of several successive sales constitutes a distinct offense, however closely they may follow each other. * * *

Another point argued by the defendant was that the second sale, charged as having been made not from the original stamped package, and the same sale also charged as having been made not in pursuance of a written order of the purchaser constituted but one offense for which only a single penalty could lawfully be imposed. This claim was also rejected by the court, which said:

The statute is not aimed at sales of the forbidden drugs qua sales, a matter entirely beyond the authority of Congress, but at sales of such drugs in violation of the requirements set forth in sections 1 and 2, enacted as aids to the enforcement of the stamp tax imposed by the act. [Cases cited.]

Each of the offenses created requires proof of a different element. The applicable rule is that, where the same act or transaction constitutes a violation of two distinct statutory provisions, the test to be applied to determine whether there are two offenses or only one is whether each provision requires proof of an additional fact which the other does not. * * * Applying the test, we must conclude that here, although both sections were violated by the one sale, two offenses were committed.

The court also held that there was no merit in the defendant's claim that the language of section 9 of the narcotic act (U. S. Code, title 26, sec. 705), prescribing the penalty for violation, was to be construed as imposing a single punishment for a violation of the distinct requirements of sections 1 and 2 when accomplished by one and the same sale. "The plain meaning of the provision," said the court, "is that each offense is subject to the penalty prescribed; and, if that be too harsh, the remedy must be afforded by act of Congress, not by judicial legislation under the guise of construction."

DEATHS DURING WEEK ENDED FEBRUARY 20, 1932

Summary of information received by telegraph from industrial insurance companies for the week ended February 20, 1932, and corresponding week of 1931. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)

	Week ended Feb. 20, 1932	Corresponding week, 1931
Policies in force.....	74, 003, 681	75, 140, 437
Number of death claims.....	16, 055	17, 290
Death claims per 1,000 policies in force, annual rate.....	11. 3	12. 0
Death claims per 1,000 policies, first 7 weeks of year, annual rate.....	9. 9	11. 2

Deaths¹ from all causes in certain large cities of the United States during the week ended February 20, 1932, infant mortality, annual death rate, and comparison with corresponding week of 1931. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)

[The rates published in this summary are based upon mid-year population estimates derived from the 1930 census.]

City	Week ended Feb. 20, 1932				Corresponding week, 1931		Death rate ² for the first 7 weeks	
	Total deaths	Death rate ¹	Deaths under 1 year	Infant mortality rate ¹	Death rate ¹	Deaths under 1 year	1932	1931
Total (83 cities).....	8, 714	12. 5	661	+ 54	14. 5	896	12. 0	14. 4
Akron.....	47	9. 2	3	37	8. 3	6	8. 0	8. 5
Albany ⁵	37	14. 8	1	20	15. 3	3	13. 1	15. 9
Atlanta ⁶	58	10. 7	7	68	21. 4	12	14. 8	16. 3
White.....	34	9. 5	3	44	14. 4	4	11. 7	13. 5
Colored.....	24	13. 1	4	113	35. 2	8	21. 1	22. 1
Baltimore ⁷	226	14. 4	11	39	16. 6	26	13. 9	17. 9
White.....	180	14. 0	9	41	15. 6	18	13. 1	16. 6
Colored.....	46	16. 0	2	32	21. 0	8	17. 4	24. 0
Birmingham ⁸	67	12. 6	6	63	17. 2	14	12. 3	14. 9
White.....	39	11. 9	2	33	12. 5	4	10. 2	11. 0
Colored.....	28	13. 9	4	169	24. 9	10	15. 8	21. 1
Boston.....	232	15. 4	26	66	18. 3	18	13. 6	17. 8
Bridgeport.....	37	13. 1	2	36	15. 2	3	11. 7	14. 4
Buffalo.....	156	13. 9	29	96	16. 1	20	13. 2	15. 0
Cambridge.....	28	12. 8	1	21	11. 4	3	13. 7	14. 2
Camden.....	32	14. 6	2	35	23. 7	6	14. 5	19. 1
Canton.....	20	9. 7	3	75	9. 8	3	9. 5	11. 0
Chicago ⁹	815	12. 1	71	76	12. 7	62	11. 0	12. 7
Cincinnati.....	134	15. 2	13	84	18. 2	6	16. 2	18. 2
Cleveland.....	266	11. 7	22	71	15. 2	17	10. 9	12. 0
Columbus.....	75	13. 1	3	30	16. 4	7	15. 0	14. 5
Dallas ⁹	53	9. 8	5	.....	11. 5	11	11. 1	12. 7
White.....	47	10. 5	4	.....	11. 9	6	10. 5	11. 6
Colored.....	6	6. 4	1	.....	12. 1	2	11. 0	17. 8
Dayton.....	68	14. 9	7	100	14. 6	9	11. 6	12. 1
Denver.....	98	17. 4	7	69	17. 2	9	17. 2	16. 1
Des Moines.....	42	15. 0	2	34	11. 2	0	12. 5	12. 4
Detroit.....	286	8. 7	31	56	11. 9	51	8. 3	8. 6
Duluth.....	22	11. 3	1	29	14. 9	2	10. 2	12. 0
El Paso.....	36	17. 6	4	.....	20. 4	8	15. 8	20. 1
Erie.....	24	10. 5	1	21	14. 2	5	10. 8	11. 9
Fall River ¹⁰	27	12. 2	1	27	15. 8	7	12. 6	13. 6
Flint.....	34	10. 4	5	73	6. 7	3	8. 4	7. 1
Fort Worth ⁶	32	9. 8	3	.....	10. 0	0	10. 9	11. 6
White.....	27	9. 8	3	.....	9. 7	0	10. 0	10. 3
Colored.....	5	9. 8	0	.....	11. 5	0	15. 4	15. 3
Grand Rapids.....	34	10. 2	1	17	7. 0	0	8. 3	8. 5
Houston.....	80	12. 9	10	.....	12. 3	4	10. 9	12. 1
White ⁶	60	13. 1	7	.....	12. 2	3	10. 3	11. 0
Colored.....	20	12. 2	3	.....	12. 6	1	12. 6	13. 1

See footnotes at end of table.

Deaths from all causes in certain large cities of the United States during the week ended February 20, 1932, infant mortality, annual death rate, and comparison with corresponding week of 1931—Continued

City	Week ended Feb. 20, 1932				Corresponding week, 1931		Death rate for the first 7 weeks	
	Total deaths	Death rate	Deaths under 1 year	Infant mortality rate	Death rate	Deaths under 1 year	1932	1931
Indianapolis *	86	12.0	5	41	18.9	8	13.1	15.4
White	69	11.0	3	28	18.6	7	12.5	14.8
Colored	17	19.3	2	137	20.8	1	17.8	19.4
Jersey City	70	11.4	9	75	13.7	10	11.0	14.9
Kansas City, Kans. *	23	9.7	1	22	20.8	3	13.2	17.0
White	19	9.9	1	0	18.4	3	12.5	15.7
Colored	4	8.3	0	0	31.1	0	15.8	22.8
Kansas City, Mo.	109	13.7	5	57	17.1	6	12.6	15.2
Knoxville *	23	10.7	2	51	15.3	4	11.3	14.7
White	20	11.2	2	56	16.5	4	10.8	13.7
Colored	3	8.6	0	0	8.8	0	14.3	19.7
Long Beach	43	14.0	1	26	7.9	1	11.4	10.6
Los Angeles	335	12.7	27	80	10.2	17	12.6	12.2
Louisville *	83	14.1	5	46	14.7	10	14.6	17.5
White	62	12.4	3	31	12.8	8	13.0	15.6
Colored	21	23.0	2	149	25.1	2	23.3	28.1
Lowell ?	29	15.1	6	131	12.0	3	15.4	14.8
Lynn	27	13.7	1	28	12.7	4	11.5	13.4
Memphis *	83	16.5	7	76	18.1	14	17.4	16.6
White	37	11.9	3	51	14.7	9	13.3	14.3
Colored	46	23.9	4	120	23.7	5	24.0	20.5
Miami *	19	8.7	0	0	14.4	5	13.1	13.6
White	13	7.7	0	0	12.0	3	12.5	13.3
Colored	6	12.4	0	0	22.7	2	15.1	14.7
Milwaukee	114	9.9	10	49	12.7	12	9.3	11.1
Minneapolis	136	14.8	9	58	12.8	9	10.6	12.5
Nashville *	29	13.0	5	75	19.7	7	13.5	17.1
White	28	12.8	3	59	15.8	4	13.0	14.9
Colored	11	13.4	2	125	30.5	3	14.6	23.1
New Bedford ?	31	14.4	0	0	14.8	7	12.7	13.8
New Haven	32	10.3	1	20	13.5	2	12.6	13.3
New Orleans *	119	13.1	6	34	19.2	11	15.3	20.7
White	75	11.6	1	9	15.2	8	12.8	17.2
Colored	44	16.7	5	82	29.0	3	21.6	29.4
New York	1,647	11.9	116	52	12.7	170	10.8	14.5
Bronx Borough	234	8.9	9	26	9.2	25	8.2	10.5
Brooklyn Borough	583	11.4	46	51	11.4	67	9.9	13.6
Manhattan Borough	606	17.8	46	66	20.2	59	16.6	21.7
Queens Borough	174	7.5	12	50	7.6	16	6.9	9.8
Richmond Borough	50	15.6	3	59	16.0	3	13.6	14.8
Newark, N. J.	119	13.9	10	55	13.3	15	11.1	14.8
Oakland	60	10.5	2	25	12.8	2	11.8	11.8
Oklahoma City	38	9.6	3	41	12.2	9	10.1	11.7
Omaha	88	21.0	4	45	13.7	3	15.8	14.5
Paterson	33	12.4	1	18	12.4	5	12.9	15.6
Peoria	34	16.0	1	28	13.0	2	12.4	15.3
Philadelphia	517	13.7	37	57	15.8	57	12.7	17.2
Pittsburgh	205	15.7	12	55	23.4	32	14.0	18.2
Portland, Oreg.	72	12.1	4	31	11.9	0	12.6	12.9
Providence	64	13.1	4	59	17.2	5	14.6	16.2
Richmond *	45	12.7	4	60	22.4	8	15.3	18.8
White	22	8.7	2	45	20.6	5	12.8	15.6
Colored	23	22.8	2	92	26.6	3	21.8	26.6
Rochester	71	11.1	5	48	16.0	8	11.6	13.8
St. Louis	215	13.5	19	68	22.1	16	14.1	19.0
St. Paul	72	13.5	0	0	13.0	4	10.6	10.9
Salt Lake City *	37	13.3	3	47	9.8	2	12.1	12.0
San Antonio	89	18.8	18	-----	14.1	9	14.7	15.6
San Diego	54	17.3	1	22	17.0	3	17.1	16.7
San Francisco	176	13.9	4	28	18.0	15	14.7	14.6
Schenectady	19	10.3	2	58	17.3	4	11.5	12.0
Seattle	92	12.8	3	30	12.2	8	12.0	12.4
Somerville	21	10.3	2	80	16.4	0	9.9	12.4
South Bend	21	9.9	0	0	11.6	2	8.9	8.3
Spokane	23	10.3	0	0	11.7	5	12.3	12.8
Springfield, Mass.	19	6.4	3	51	12.3	1	12.2	13.8
Syracuse	46	11.1	3	39	15.4	8	12.0	13.7
Tacoma	25	12.0	3	83	17.9	4	12.2	14.4

See footnotes at end of table.

Deaths from all causes in certain large cities of the United States during the week ended February 20, 1932, infant mortality, annual death rate, and comparison with corresponding week of 1931—Continued

City	Week ended Feb. 20, 1932				Corresponding week, 1931		Death rate for the first 7 weeks	
	Total deaths	Death rate	Deaths under 1 year	Infant mortality rate	Death rate	Deaths under 1 year	1932	1931
Tampa ¹	18	8.7	3	86	14.9	3	11.4	16.2
White.....	12	7.4	1	35	12.6	2	10.5	14.6
Colored.....	6	13.8	2	317	23.5	1	14.7	22.1
Toledo.....	58	10.1	5	54	14.9	2	12.1	13.1
Trenton.....	29	12.2	2	40	19.4	3	14.9	19.2
Utica.....	19	9.7	4	114	17.3	0	15.6	16.6
Washington, D. C. ²	127	13.4	9	51	20.8	18	15.8	19.3
White.....	89	13.0	2	16	16.4	5	14.2	16.7
Colored.....	38	14.5	7	125	32.4	13	20.1	25.9
Waterbury.....	13	6.7	1	33	12.9	2	9.5	11.6
Wilmington, Del. ³	34	16.7	2	45	13.7	4	14.1	17.2
Worcester.....	44	11.6	6	84	13.0	2	12.4	15.9
Yonkers.....	23	8.5	1	26	10.9	2	7.4	11.6
Youngstown.....	40	11.9	2	32	17.5	9	10.4	11.9

¹ Deaths of nonresidents are included. Stillbirths are excluded.

² These rates represent annual rates per 1,000 population, as estimated for 1932 and 1931 by the arithmetic method.

³ Deaths under 1 year of age per 1,000 live births. Cities left blank are not in the registration area for births.

⁴ Data for 78 cities.

⁵ Deaths for week ended Friday.

⁶ For the cities for which deaths are shown by color the percentages of colored population in 1930 were as follows: Atlanta, 33; Baltimore, 18; Birmingham, 38; Dallas, 17; Fort Worth, 16; Houston, 27; Indianapolis, 12; Kansas City, Kans., 19; Knoxville, 16; Louisville, 15; Memphis, 38; Miami, 23; Nashville, 28; New Orleans, 29; Richmond, 29; Tampa, 21; and Washington, D. C., 27.

⁷ Population Apr. 1, 1930; decreased 1920 to 1930, no estimate made.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended February 27, 1932, and February 28, 1931

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended February 27, 1932, and February 28, 1931

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931
New England States:								
Maine.....	3	6	19	71	481	48	0	0
New Hampshire.....	1			21	16	82	0	0
Vermont.....				1	89	4	0	0
Massachusetts.....	58	39	12	53	359	481	2	4
Rhode Island.....	2	7		1	670	1	0	0
Connecticut.....	8	9	24	133	301	438	3	2
Middle Atlantic States:								
New York.....	143	120	1,322	1,92	1,903	1,099	9	20
New Jersey.....	47	53	99	104	189	721	4	4
Pennsylvania.....	198	99			2,649	2,444	9	16
East North Central States:								
Ohio.....	67	67	488	828	1,157	580	0	7
Indiana.....	57	42	150	125	76	878	12	8
Illinois.....	59	152	219	245	150	1,427	11	12
Michigan.....	23	38	135	261	539	270	1	11
Wisconsin.....	16	14	767	249	318	381	2	3
West North Central States:								
Minnesota.....	13	11	2	2	124	67	1	1
Iowa.....	13	7	22	1	7	15	0	1
Missouri.....	38	27	27	100		551	1	14
North Dakota.....	14	9			77	6	0	2
South Dakota.....	6	4	216		62	14	1	0
Nebraska.....	9	9	7	30	26	4	1	2
Kansas.....	15	13	28	344	192	27	3	3
South Atlantic States:								
Delaware.....	8			7	2	24	0	0
Maryland.....	30	24	82	352	38	727	1	1
District of Columbia.....	12	31	3	8	2	90	1	1
Virginia.....								
West Virginia.....	20	13	124	169	437	62	0	0
North Carolina.....	21	14	63	365	294	419	2	2
South Carolina.....	8	9	1,037	3,463	90	160	0	9
Georgia.....	10	11	92	1,421	6	134	2	3
Florida.....	14	6		204	3	135	0	3

¹ New York City only.

² Week ended Friday.

³ Typhus fever, week ended Feb. 27, 1932, 1 case in Virginia.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended February 27, 1932, and February 28, 1931—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931
East South Central States:								
Kentucky.....	17	2	435	9	85	203	7	2
Tennessee.....	27	7	335	355	73	277	2	3
Alabama.....	20	24	83	407		531	0	4
Mississippi.....	14	8					0	2
West South Central States:								
Arkansas.....	13		145	166	2	1	0	0
Louisiana.....	29	47	7	151	11	9	1	4
Oklahoma ⁴	28	21	1,306	184	31	7	7	1
Texas.....	45	36	251	33	28	111	1	1
Mountain States:								
Montana.....	1	1	1,867		56	1	0	1
Idaho.....			1	4		4	1	3
Wyoming.....		1				2	0	1
Colorado.....	3	6			69	147	2	2
New Mexico.....	13	4	8	1	60	27	1	1
Arizona.....	5	5	40	5	2	157	0	3
Utah ¹		2	22				0	2
Pacific States:								
Washington.....	2	11	8		583	44	1	2
Oregon.....	1	8	323	77	99	99	0	0
California.....	68	57	236	555	420	939	5	6
Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931
New England States:								
Maine.....	0	0	23	19	0	0	1	1
New Hampshire.....	0	0	34	4	0	0	0	0
Vermont.....	0	0	20	7	20	0	3	0
Massachusetts.....	0	2	499	378	0	0	1	2
Rhode Island.....	0	0	57	58	0	0	0	0
Connecticut.....	1	0	129	40	3	0	1	0
Middle Atlantic States:								
New York.....	10	2	1,520	951	3	6	9	17
New Jersey.....	0	0	265	272	0	0	1	1
Pennsylvania.....	0	0	883	595	0	0	13	10
East North Central States:								
Ohio.....	0	3	611	707	41	54	5	12
Indiana.....	0	0	183	410	13	137	8	3
Illinois.....	3	1	411	547	16	33	10	4
Michigan.....	1	1	441	386	3	32	7	1
Wisconsin.....	1	0	147	161	10	6	1	1
West North Central States:								
Minnesota.....	1	3	150	119	3	4	2	6
Iowa.....	1	0	57	120	18	54	1	0
Missouri.....	0	0	82	232	5	50	1	0
North Dakota.....	0	0	19	28	8	1	0	0
South Dakota.....	0	0	15	38	14	21	0	0
Nebraska.....	0	0	54	56	8	55	1	1
Kansas.....	0	1	95	76	2	103	2	1
South Atlantic States:								
Delaware.....	0	0	9	30	0	0	1	0
Maryland ²	0	1	147	142	0	0	6	3
District of Columbia.....	0	0	22	18	0	0	1	0
Virginia ³								
West Virginia.....	0	1	36	21	0	4	4	7
North Carolina.....	0	0	37	47	5	0	4	2
South Carolina.....	1	1	11	11	0	0	9	6
Georgia.....	0	1	14	69	0	0	11	17
Florida.....	1	0	5	4	1	0	3	3

² Week ended Friday.

³ Typhus fever, week ended Feb. 27, 1932, 1 case in Virginia.

⁴ Figures for 1932 are exclusive of Oklahoma City and Tulsa.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended February 27, 1932, and February 28, 1931—Continued

Division and State	Polliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931	Week ended Feb. 27, 1932	Week ended Feb. 28, 1931
East South Central States:								
Kentucky.....	2	0	112	91	4	11	11	6
Tennessee.....	0	0	33	48	22	1	9	1
Alabama.....	0	0	22	21	3	8	6	5
Mississippi.....	0	0	8	27	36	13	7	4
West South Central States:								
Arkansas.....	0	0	32	13	11	10	2	6
Louisiana.....	0	0	15	22	11	33	20	8
Oklahoma ¹	0	0	30	42	37	136	1	8
Texas.....	0	0	59	28	7	60	4	1
Mountain States:								
Montana.....	1	1	28	44	1	1	1	0
Idaho.....	0	0	3	12	0	2	0	2
Wyoming.....	0	0	11	39	0	2	0	0
Colorado.....	0	0	29	54	1	11	0	2
New Mexico.....	1	0	8	9	0	1	0	0
Arizona.....	1	0	4	2	0	1	0	0
Utah ²	0	0	2	11	0	0	0	0
Pacific States:								
Washington.....	1	0	25	63	16	33	2	0
Oregon.....	0	1	24	32	10	32	3	0
California.....	3	3	151	120	15	45	8	5

² Week ended Friday.

¹ Figures for 1932 are exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
<i>December, 1931</i>										
Hawaii Territory.....	2	17			195		0	2	0	6
<i>January, 1932</i>										
Alabama.....	8	193	324	65	39	16	4	183	194	79
Colorado.....	5	47	3		58		2	215	14	4
Delaware.....		25	7		5		0	77	0	0
Illinois.....	31	590	193	8	279	4	20	1,663	86	46
Louisiana.....	4	147	60	3	47	8	2	75	19	51
Missouri.....	12	315	31	12	96		2	463	121	8
Montana.....	2	11	452		481		2	161	10	8
New Mexico.....	1	75	263		40		3	56	5	7
New York.....	42	618		3	3,925		16	3,504	18	73
North Carolina.....	11	217	110		545	59	9	294	7	36
Oregon.....	1	10	354	2	107		1	133	87	9
Pennsylvania.....	32	590			5,593	2	8	2,587	0	94
Rhode Island.....		37	11		4,205		1	180	0	0
West Virginia.....	1	214	245		1,543		1	238	11	63
Wisconsin.....	10	98	119		741		7	422	13	5

December, 1931

Hawaii Territory:	Cases
Chicken pox.....	10
Conjunctivitis, follicular.....	203
Dysentery (amebic).....	1
Dysentery (bacillary).....	1

Hawaii Territory—Continued.

Cases	
Hookworm disease.....	32
Leprosy.....	1
Mumps.....	3
Puerperal septicemia.....	3
Trachoma.....	6
Whooping cough.....	9

January, 1932		Mumps—Continued.	
	Cases		Cases
Anthrax:		Missouri.....	56
Montana.....	1	Montana.....	9
New York.....	1	New Mexico.....	44
Chicken pox:		New York.....	1,066
Alabama.....	183	Oregon.....	130
Colorado.....	284	Pennsylvania.....	2,521
Delaware.....	93	Rhode Island.....	361
Illinois.....	1,864	West Virginia.....	38
Louisiana.....	13	Wisconsin.....	1,112
Missouri.....	465	Ophthalmia neonatorum:	
Montana.....	154	Colorado.....	1
New Mexico.....	101	Illinois.....	9
New York.....	2,707	New York.....	4
North Carolina.....	575	North Carolina.....	1
Oregon.....	275	Pennsylvania.....	27
Pennsylvania.....	4,068	Paratyphoid fever:	
Rhode Island.....	127	Colorado.....	1
West Virginia.....	281	Illinois.....	3
Wisconsin.....	1,845	New York.....	10
Dysentery:		Psittacosis:	
Illinois.....	24	Oregon.....	1
Illinois (amebic).....	1	Puerperal septicemia:	
Illinois (bacillary).....	4	Colorado.....	2
New York.....	4	Illinois.....	13
Food poisoning:		New York.....	15
New Mexico.....	2	Pennsylvania.....	24
German measles:		Rabies in animals:	
Colorado.....	5	Illinois.....	12
Illinois.....	11	Louisiana.....	4
Montana.....	4	Missouri.....	4
New Mexico.....	3	New York ¹	4
New York.....	113	Scabies:	
North Carolina.....	22	Montana.....	5
Pennsylvania.....	91	Oregon.....	50
Rhode Island.....	7	Septic sore throat:	
Wisconsin.....	31	Illinois.....	11
Hookworm disease:		Louisiana.....	1
Louisiana.....	4	Missouri.....	17
Impetigo contagiosa:		Montana.....	13
Colorado.....	3	New York.....	30
Illinois.....	5	North Carolina.....	17
Montana.....	4	Oregon.....	3
Oregon.....	89	Rhode Island.....	3
Lead poisoning:		Silicosis, pulmonary:	
Illinois.....	1	Montana.....	1
Leprosy:		Tetanus:	
Louisiana.....	5	Illinois.....	3
Lethargic encephalitis:		Louisiana.....	4
Alabama.....	2	New York.....	4
Illinois.....	1	Pennsylvania.....	1
New York.....	11	Trachoma:	
Oregon.....	2	Illinois.....	2
Pennsylvania.....	10	Louisiana.....	1
Rhode Island.....	1	Missouri.....	35
Wisconsin.....	1	Montana.....	1
Ludwig's angina:		Oregon.....	1
Illinois.....	1	Pennsylvania.....	6
Milk sickness:		Wisconsin.....	1
New Mexico.....	1	Trichinosis:	
Mumps:		Illinois.....	1
Alabama.....	127	New York.....	16
Colorado.....	148	Tularaemia:	
Delaware.....	35	Alabama.....	4
Illinois.....	278	Illinois.....	27
Louisiana.....	8	Louisiana.....	4

¹ Exclusive of New York City.

Tularaemia—Continued.		Cases	Vincent's angina—Continued.		Cases
Missouri.....	18		New York ¹	65	
New York.....	3		Oregon.....	4	
North Carolina.....	2		Whooping cough:		
Pennsylvania.....	1		Alabama.....	118	
Typhus fever:			Colorado.....	62	
Alabama.....	6		Delaware.....	37	
North Carolina.....	3		Illinois.....	1,456	
Undulant fever:			Louisiana.....	99	
Colorado.....	1		Missouri.....	749	
Illinois.....	7		Montana.....	41	
Louisiana.....	1		New Mexico.....	37	
Missouri.....	2		New York.....	2,327	
New York.....	7		North Carolina.....	1,373	
Oregon.....	3		Oregon.....	51	
Wisconsin.....	1		Pennsylvania.....	3,188	
Vincent's angina:			Rhode Island.....	110	
Illinois.....	31		West Virginia.....	326	
New Mexico.....	2		Wisconsin.....	1,058	

PATIENTS IN INSTITUTIONS FOR FEEBLE-MINDED, JANUARY TO MARCH, 1930

Reports for the first quarter of the year 1930 were received by the Public Health Service from 34 institutions for the care of the feeble-minded, located in 28 States and the Territory of Hawaii. The total number of persons in these institutions on March 31, 1930, including those on temporary leave or otherwise absent but still on the books, was 37,062.

The first admissions were as follows:

	Male	Female	Total
January.....	190	181	371
February.....	197	188	385
March.....	262	187	449
Total.....	649	551	1,200

Of the first admissions during the three months, 54.1 per cent were males and 45.9 per cent females, the ratio being 118 males per 100 females.

One hundred and seventy-nine male patients and 129 female patients were discharged and 146 males and 92 females died during the three months. The annual death rates, based on the number of patients on the books March 31, 1930, were: Males, 30.9 per 1,000; females, 20.8 per 1,000; persons, 26.0 per 1,000.

The following table shows the number of patients in the institutions and on temporary leave on January 1, 1930, and at the end of each month of the first quarter of 1930, and the percentages of the total patients who were on leave.

¹ Exclusive of New York City.

	Jan. 1, 1930	Jan. 1, 1930	Feb. 28, 1930	Mar. 31, 1930
Patients in institutions:				
Male.....	15,355	15,758	15,868	16,009
Female.....	15,292	15,578	15,691	15,785
Total.....	30,647	31,336	31,559	31,794
Patients on temporary leave:				
Male.....	3,469	3,149	3,103	3,133
Female.....	2,298	2,123	2,130	2,135
Total.....	5,767	5,272	5,233	5,268
Total patients on books:				
Male.....	18,824	18,907	18,971	19,142
Female.....	17,590	17,701	17,821	17,920
Total.....	36,414	36,608	36,792	37,062
Per cent of total patients on temporary leave:				
Male.....	18.4	16.7	16.4	16.4
Female.....	13.1	12.0	12.0	11.9
Total.....	15.8	14.4	14.2	14.2

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 98 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 34,050,000. The estimated population of the 91 cities reporting deaths is more than 32,490,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended February 20, 1932, and February 21, 1931

	1932	1931	Estimated expectancy
<i>Cases reported</i>			
Diphtheria:			
46 States.....	1,170	1,100	-----
98 cities.....	469	447	797
Measles:			
45 States.....	9,186	12,705	-----
98 cities.....	3,471	4,515	-----
Meningococcus meningitis:			
46 States.....	88	145	-----
98 cities.....	45	96	-----
Poliomyelitis:			
46 States.....	23	22	-----
Scarlet fever:			
46 States.....	5,640	5,799	-----
98 cities.....	2,714	2,396	1,592
Smallpox:			
46 States.....	310	904	-----
98 cities.....	29	129	51
Typhoid fever:			
46 States.....	170	145	-----
98 cities.....	20	45	27
<i>Deaths reported</i>			
Influenza and pneumonia:			
91 cities.....	1,080	1,600	-----
Smallpox:			
91 cities.....	0	0	-----

City reports for week ended February 20, 1932

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded, and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1923 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumo- nia, deaths reported
		Cases, estimated expect- ancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND								
Maine:								
Portland.....	7	0	1	0	0	218	0	2
New Hampshire:								
Concord.....	0	1	0	0	0	0	0	1
Manchester.....	0	0	0	3	0	0	0	0
Nashua.....	0	0	0	0	0	0	0	0
Vermont:								
Barre.....	3	0	0	0	0	0	0	0
Burlington.....	3	0	0	0	0	15	0	0
Massachusetts:								
Boston.....	33	27	40	2	2	20	19	20
Fall River.....	5	3	0	0	0	12	6	3
Springfield.....	25	4	0	1	0	6	36	0
Worcester.....	4	3	2	0	0	0	66	5
Rhode Island:								
Pawtucket.....	0	1	0	0	0	0	0	0
Providence.....	17	8	2	0	0	408	4	6
Connecticut:								
Bridgeport.....	4	5	0	3	0	0	0	7
Hartford.....	15	5	0	0	0	1	33	5
New Haven.....	13	1	0	8	1	0	16	2
MIDDLE ATLANTIC								
New York:								
Buffalo.....	46	11	6	0	0	12	7	23
New York.....	207	188	107	158	13	75	133	220
Rochester.....	8	4	1	1	0	390	16	5
Syracuse.....	26	2	0	0	0	189	24	3
New Jersey:								
Camden.....	8	5	5	1	1	3	1	3
Newark.....	57	14	5	9	0	1	60	12
Trenton.....	9	2	0	3	0	2	10	3
Pennsylvania:								
Philadelphia.....	156	65	14	7	5	6	73	53
Pittsburgh.....	52	18	9	22	11	186	65	42
Reading.....	28	2	0	0	0	4	2	3
EAST NORTH CENTRAL								
Ohio:								
Cincinnati.....	14	7	4	1	2	0	0	15
Cleveland.....	28	31	8	31	2	383	123	22
Columbus.....	9	2	3	230	0	1	2	7
Toledo.....	42	4	0	11	5	14	1	3
Indiana:								
Fort Wayne.....	1	3	9	0	0	0	0	0
Indianapolis.....	78	6	0	0	0	3	110	20
South Bend.....	4	1	0	0	0	0	0	2
Terre Haute.....	0	0	1	1	1	1	0	3
Illinois:								
Chicago.....	108	92	40	86	18	172	7	96
Springfield.....	5	1	0	3	2	0	3	3
Michigan:								
Detroit.....	50	42	25	20	5	48	26	21
Flint.....	15	2	0	75	0	56	88	12
Grand Rapids.....	6	1	1	0	0	126	14	4

City reports for week ended February 20, 1932—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST NORTH CENTRAL—CON.								
Wisconsin:								
Kenosha.....	4	0	0	-----	0	0	0	3
Madison.....	4	1	1	-----	-----	1	1	-----
Milwaukee.....	80	14	5	1	1	167	53	16
Racine.....	36	1	0	-----	-----	10	133	0
Superior.....	1	0	0	-----	0	1	40	0
WEST NORTH CENTRAL								
Minnesota:								
Duluth.....	6	0	0	-----	-----	0	0	2
Minneapolis.....	12	13	5	-----	8	2	11	21
St. Paul.....	6	5	0	3	3	2	3	11
Iowa:								
Davenport.....	5	0	6	-----	-----	0	2	-----
Des Moines.....	0	2	0	-----	-----	0	0	-----
Sioux City.....	3	0	4	-----	-----	0	1	-----
Waterloo.....	8	0	1	-----	-----	0	0	-----
Missouri:								
Kansas City.....	42	5	4	-----	1	1	1	17
St. Joseph.....	16	1	5	-----	0	0	1	1
St. Louis.....	27	37	12	3	2	2	4	9
North Dakota:								
Fargo.....	1	0	1	-----	0	44	0	0
Grand Forks.....	0	0	0	-----	-----	0	0	-----
South Dakota:								
Aberdeen.....	0	0	0	-----	-----	23	0	-----
Sioux Falls.....	0	0	0	-----	-----	0	0	-----
Nebraska:								
Omaha.....	6	6	5	-----	0	0	0	33
Kansas:								
Topeka.....	22	1	2	-----	1	1	2	0
Wichita.....	23	2	6	-----	0	52	0	6
SOUTH ATLANTIC								
Delaware:								
Wilmington.....	1	1	1	-----	0	1	7	4
Maryland:								
Baltimore.....	106	21	9	11	3	2	138	20
Cumberland.....	0	0	0	1	1	2	0	1
Frederick.....	3	0	1	-----	0	0	1	0
District of Columbia:								
Washington.....	38	16	18	0	2	3	0	21
Virginia:								
Lynchburg.....	0	1	1	-----	0	0	0	1
Norfolk.....	2	3	2	-----	0	0	0	8
Richmond.....	4	3	5	-----	2	0	0	3
Roanoke.....	2	1	3	-----	0	0	0	0
West Virginia:								
Charleston.....	6	1	1	3	0	110	0	0
Huntington.....	0	0	0	-----	0	0	0	0
Wheeling.....	0	0	0	-----	0	3	0	4
North Carolina:								
Raleigh.....	2	0	0	-----	-----	59	0	0
Wilmington.....	1	0	0	-----	0	0	0	1
Winston-Salem.....	8	1	1	-----	0	0	1	2
South Carolina:								
Charleston.....	0	0	0	54	0	1	0	6
Columbia.....	3	0	0	-----	0	0	0	6
Greenville.....	0	1	0	-----	0	0	0	0
Georgia:								
Atlanta.....	2	3	3	23	1	0	1	7
Brunswick.....	1	0	0	-----	0	0	1	2
Savannah.....	1	0	0	4	0	2	0	4
Florida:								
Miami.....	1	2	3	-----	0	0	1	2
Tampa.....	0	1	2	-----	0	0	0	1

City reports for week ended February 20, 1932—Continued

Division, State, and city	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
EAST SOUTH CENTRAL								
Kentucky:								
Covington.....	0	1	1	0	0	0	0	3
Lexington.....	5	0	1	0	0	0	2	2
Tennessee:								
Memphis.....	2	3	7	2	2	0	0	11
Nashville.....	0	1	2	1	0	0	0	5
Alabama:								
Birmingham.....	2	3	3	4	1	0	5	4
Mobile.....	0	1	0	0	0	0	0	0
Montgomery.....	2	1	0	0	0	0	3	0
WEST SOUTH CENTRAL								
Arkansas:								
Fort Smith.....	0	0	0	0	0	0	0	0
Little Rock.....	2	1	2	0	1	7	3	0
Louisiana:								
New Orleans.....	0	14	22	4	1	0	0	5
Shreveport.....	3	0	0	0	50	4	0	6
Oklahoma:								
Muskogee.....	0	0	0	12	1	0	0	0
Oklahoma City.....	4	2	0	130	0	0	0	8
Texas:								
Dallas.....	5	7	9	77	4	25	0	10
Fort Worth.....	6	2	7	2	2	0	0	6
Galveston.....	0	1	0	0	0	0	0	2
Houston.....	0	6	15	0	0	0	1	9
San Antonio.....	1	3	0	1	10	0	0	14
MOUNTAIN								
Montana:								
Billings.....	1	1	0	2	0	2	0	0
Great Falls.....	10	0	0	3	3	0	2	2
Helena.....	1	0	0	0	0	4	0	0
Missoula.....	0	0	0	100	0	0	0	0
Idaho:								
Boise.....	0	0	0	0	0	1	2	0
Colorado:								
Denver.....	20	8	4	4	9	27	12	0
Pueblo.....	14	0	1	0	0	1	2	0
New Mexico:								
Albuquerque.....	2	0	1	0	14	0	1	0
Arizona:								
Pheonix.....	0	0	0	1	0	0	2	0
Utah:								
Salt Lake City.....	10	2	0	2	0	1	5	0
Nevada:								
Reno.....	0	0	1	0	1	0	0	0
PACIFIC								
Washington:								
Seattle.....	36	4	0	0	333	1	0	0
Spokane.....	11	1	1	0	8	0	0	0
Tacoma.....	8	1	0	0	7	2	3	0
Oregon:								
Portland.....	17	6	4	9	0	24	10	8
Salem.....	1	0	1	50	2	1	0	0
California:								
Los Angeles.....	159	32	20	171	2	8	24	17
Sacramento.....	24	2	1	13	3	144	1	11
San Francisco.....	82	13	2	5	1	91	0	8

City reports for week ended February 20, 1932—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland.....	3	4	0	0	0	0	0	0	0	7	29
New Hampshire:											
Concord.....	0	10	0	0	0	0	0	0	0	0	10
Manchester.....	2	9	0	0	0	2	0	0	0	0	26
Nashua.....	0	1	0	0	0	0	0	0	0	0	0
Vermont:											
Barre.....	0	0	0	0	0	1	0	0	0	2	3
Burlington.....	1	0	0	0	0	0	0	0	0	4	13
Massachusetts:											
Boston.....	93	176	0	0	0	11	0	0	0	21	232
Fall River.....	4	4	0	0	0	2	0	0	0	4	27
Springfield.....	10	9	0	0	0	1	0	0	0	4	18
Worcester.....	11	46	0	0	0	1	0	0	0	23	44
Rhode Island:											
Pawtucket.....	2	0	0	0	0	0	0	0	0	0	24
Providence.....	15	23	0	0	0	2	0	0	0	13	64
Connecticut:											
Bridgeport.....	11	4	0	2	0	3	0	0	0	1	37
Hartford.....	7	8	0	0	0	1	0	0	0	29	32
New Haven.....	7	24	0	0	0	1	0	0	0	14	32
MIDDLE ATLANTIC											
New York:											
Buffalo.....	28	107	0	0	0	3	1	1	0	38	153
New York.....	290	801	0	0	0	113	7	2	2	180	1,647
Rochester.....	13	89	0	0	0	2	0	0	0	3	70
Syracuse.....	13	22	0	0	0	1	0	0	0	73	46
New Jersey:											
Camden.....	6	42	0	0	0	1	0	0	0	7	32
Newark.....	38	27	0	0	0	12	1	0	0	31	125
Trenton.....	6	2	0	0	0	3	0	0	0	13	29
Pennsylvania:											
Philadelphia.....	166	265	0	0	0	27	1	5	0	316	517
Pittsburgh.....	34	60	0	0	0	19	1	0	0	42	205
Reading.....	6	12	0	0	0	1	0	0	0	16	23
EAST NORTH CENTRAL											
Ohio:											
Cincinnati.....	28	41	1	1	0	9	0	0	0	6	134
Cleveland.....	57	80	0	0	0	18	1	0	0	263	206
Columbus.....	12	6	1	0	0	1	0	0	0	14	75
Toledo.....	14	8	1	0	0	4	0	0	0	89	58
Indiana:											
Fort Wayne.....	5	4	0	0	0	0	0	0	0	5	27
Indianapolis.....	15	2	7	1	0	1	0	0	0	37	21
South Bend.....	3	2	0	0	0	0	0	0	0	0	21
Terre Haute.....	2	0	0	0	0	0	0	0	0	0	21
Illinois:											
Chicago.....	143	205	2	0	0	40	2	0	1	147	815
Springfield.....	3	5	0	0	0	1	1	0	0	4	31
Michigan:											
Detroit.....	120	206	2	0	0	22	0	1	0	166	286
Flint.....	17	3	0	0	0	1	1	3	0	3	34
Grand Rapids.....	15	5	0	0	0	0	0	0	0	1	34
Wisconsin:											
Kenosha.....	2	8	0	0	0	0	0	0	0	0	8
Madison.....	5	4	0	0	0	0	3	0	0	8	8
Milwaukee.....	37	29	1	0	0	7	0	0	0	118	114
Racine.....	4	0	0	0	0	0	0	0	0	0	15
Superior.....	3	1	0	0	0	0	0	1	0	1	2
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	10	2	0	0	0	1	0	0	0	1	22
Minneapolis.....	42	48	1	0	0	3	0	0	0	6	135
St. Paul.....	29	15	0	0	0	0	1	0	0	6	72

City reports for week ended February 20, 1932—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culo- sis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST NORTH CENTRAL—CON.											
Iowa:											
Davenport.....	2	14	1	0	-----	0	0	-----	0	-----	-----
Des Moines.....	7	2	2	0	-----	0	0	-----	0	-----	42
Sioux City.....	2	2	0	0	-----	0	0	-----	0	-----	0
Waterloo.....	1	1	0	1	-----	0	0	-----	0	-----	4
Missouri:											
Kansas City.....	23	21	0	0	0	5	0	0	0	43	109
St. Joseph.....	3	3	0	0	0	0	0	0	1	2	16
St. Louis.....	48	26	2	0	0	14	1	0	0	98	215
North Dakota:											
Fargo.....	2	1	0	0	0	0	0	0	0	0	7
Grand Forks...	1	0	0	0	-----	0	0	-----	0	-----	-----
South Dakota:											
Aberdeen.....	1	0	0	0	-----	0	0	-----	0	-----	-----
Sioux Falls.....	3	0	1	1	-----	0	0	-----	0	-----	7
Nebraska:											
Omaha.....	6	3	3	6	0	2	0	0	0	1	88
Kansas:											
Topeka.....	2	3	1	0	0	0	0	0	0	13	10
Wichita.....	4	2	1	0	0	0	0	0	0	0	34
SOUTH ATLANTIC											
Delaware:											
Wilmington...	6	3	0	0	0	0	0	0	0	9	34
Maryland:											
Baltimore.....	38	56	0	0	0	10	1	1	0	168	226
Cumberland...	1	3	-0	0	0	2	0	0	0	8	15
Frederick.....	0	3	0	0	0	0	0	0	0	3	3
District of Col.:											
Washington...	25	27	0	0	0	7	0	0	0	30	127
Virginia:											
Lynchburg.....	0	2	0	0	0	1	0	0	0	7	10
Norfolk.....	2	3	0	0	0	1	0	3	0	0	-----
Richmond.....	4	8	0	0	0	3	0	0	0	0	44
Roanoke.....	1	3	0	0	0	0	0	0	0	1	8
West Virginia:											
Charleston.....	1	0	1	0	0	1	0	0	0	2	18
Huntington...	0	0	0	0	0	0	0	0	0	0	-----
Wheeling.....	1	4	0	0	0	1	0	0	0	11	22
North Carolina:											
Raleigh.....	1	0	0	0	0	0	0	0	0	1	11
Wilmington...	0	1	0	0	0	0	0	0	0	9	10
Winston-Salem...	2	2	0	0	0	2	0	0	1	20	15
South Carolina:											
Charleston.....	1	1	0	0	0	3	0	0	0	0	25
Columbia.....	0	0	0	0	0	1	0	0	0	1	31
Greenville.....	0	1	1	0	0	0	1	0	0	0	-----
Georgia:											
Atlanta.....	5	5	1	0	0	2	0	1	0	2	58
Brunswick.....	0	0	0	0	0	0	0	0	0	0	4
Savannah.....	1	0	0	0	0	3	0	2	0	2	26
Florida:											
Miami.....	2	3	0	0	0	0	1	0	0	0	19
Tampa.....	1	0	0	0	0	1	1	1	0	0	19
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	2	2	0	0	0	2	0	0	0	0	26
Lexington.....	0	1	0	0	0	2	0	0	0	5	-----
Tennessee:											
Memphis.....	11	7	2	3	0	9	0	0	0	37	83
Nashville.....	3	0	0	0	0	3	0	0	0	8	39
Alabama:											
Birmingham...	2	3	1	0	0	4	0	0	0	4	67
Mobile.....	0	1	0	2	0	0	0	0	0	0	13
Montgomery...	1	0	0	0	-----	0	0	-----	0	-----	-----

City reports for week ended February 20, 1932—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith.....	1	2	0	0			0	0		1	
Little Rock.....	2	1	0	0	0	0	0	0	0	5	3
Louisiana:											
New Orleans...	9	10	0	0	0	5	2	1	0	1	119
Shreveport.....	0	1	1	0	0	1	0	0	0	3	38
Oklahoma:											
Muskogee.....		0	2	0	0			0		0	
Oklahoma City..	2	0	2	0	0	0	0	0	0	0	38
Texas:											
Dallas.....	6	7	2	0	0	2	0	0	0	2	53
Fort Worth.....	4	7	3	0	0	1	0	0	0	0	32
Galveston.....	0	0	0	0	0	2	1	0	0	0	16
Houston.....	4	5	5	2	0	6	0	0	0	0	80
San Antonio.....	2	0	0	0	0	9	0	0	0	0	89
MOUNTAIN											
Montana:											
Billings.....	0	0	1	0	0	0	0	0	0	0	7
Great Falls.....	4	2	0	0	0	0	0	0	0	0	12
Helena.....	0	0	0	0	0	0	0	0	0	3	5
Missoula.....	0	0	0	0	0	0	0	0	0	0	2
Idaho:											
Boise.....	1	0	0	0	0	0	0	0	0	0	5
Colorado:											
Denver.....	16	25	0	0	0	6	0	0	0	10	93
Pueblo.....	1	1	0	0	0	0	0	0	0	1	8
New Mexico:											
Albuquerque.....	1	1	0	0	0	1	0	0	0	0	10
Arizona:											
Phoenix.....	1	1	0	0	0	4	0	0	0	0	
Utah:											
Salt Lake City..	3	2	0	0	0	2	0	0	0	0	37
Nevada:											
Reno.....	0	1	0	0	0	0	0	0	0	0	10
PACIFIC											
Washington:											
Seattle.....	13	9	3	1			1	0		10	
Spokane.....	6	2	6	0			0	0		0	
Tacoma.....	3	2	2	0	0	1	0	0	0	7	25
Oregon:											
Portland.....	6	12	13	5	0	3	1	0	0	2	72
Salem.....	0	1	1	0			0	0		3	
California:											
Los Angeles.....	44	26	3	8	0	18	2	1	0	35	335
Sacramento.....	3	4	0	0	0	2	0	0	0	0	23
San Francisco...	26	14	1	2	0	11	1	0	0	10	176

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)			
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases estimated expectancy	Cases	Deaths	
NEW ENGLAND										
Massachusetts:										
Springfield.....			1	1	0	0	0	0	0	0
Connecticut:										
Hartford.....			1	6	0	1	0	0	0	0
New Haven.....			1	1	0	0	0	0	0	0

The following table gives the rates per 100,000 population for 98 cities for the 5-week period ended February 20, 1932, compared with those for a like period ended February 21, 1931. The population figures used in computing the rates are estimated mid-year populations for 1931 and 1932, respectively, derived from the 1930 census. The 98 cities reporting cases have an estimated aggregate population of more than 34,000,000. The 91 cities reporting deaths have more than 32,400,000 estimated population.

*Summary of weekly reports from cities, January 17 to February 20, 1932—Annual rates per 100,000 population, compared with rates for the corresponding period of 1931*¹

DIPHTHERIA CASE RATES

	Week ended—									
	Jan. 23, 1932	Jan. 24, 1931	Jan. 30, 1932	Jan. 31, 1931	Feb. 6, 1932	Feb. 7, 1931	Feb. 13, 1932	Feb. 14, 1931	Feb. 20, 1932	Feb. 21, 1931
98 cities.....	97	2 79	84	2 88	2 79	2 78	4 79	67	72	70
New England.....	50	106	96	106	48	84	5 65	75	168	89
Middle Atlantic.....	82	67	69	68	6 73	53	75	53	65	56
East North Central.....	97	93	68	110	79	96	74	85	57	78
West North Central.....	102	84	99	109	81	99	89	55	85	55
South Atlantic.....	168	2 65	120	2 73	84	2 75	59	59	83	77
East South Central.....	87	76	116	70	7 94	53	87	53	75	59
West South Central.....	260	81	204	183	152	156	168	118	158	132
Mountain.....	86	35	43	70	60	78	103	78	52	87
Pacific.....	99	88	63	45	72	69	5 78	49	47	57

MEASLES CASE RATES

98 cities.....	346	2 405	334	2 418	2 448	2 473	4 433	521	533	703
New England.....	2,064	522	1,922	438	2,322	702	2,019	534	1,569	635
Middle Atlantic.....	154	251	149	306	6 228	353	253	398	384	645
East North Central.....	215	80	210	142	321	151	364	183	577	300
West North Central.....	150	1,094	114	1,521	172	1,489	182	1,314	197	574
South Atlantic.....	110	2 806	71	21,034	196	21,296	245	1,820	359	2,505
East South Central.....	17	705	23	916	7 0	1,034	17	604	12	1,051
West South Central.....	162	10	115	17	198	3	320	17	251	24
Mountain.....	509	757	509	496	284	1,123	168	687	136	1,210
Pacific.....	828	73	938	110	1,138	112	5 966	169	1,125	223

SCARLET FEVER CASE RATES

98 cities.....	300	2 334	336	2 337	3 349	2 320	4 291	248	417	373
New England.....	640	575	614	519	705	534	5 634	683	738	606
Middle Atlantic.....	361	314	416	328	6 447	504	546	322	631	381
East North Central.....	312	384	388	377	325	331	385	375	350	364
West North Central.....	150	323	212	386	294	480	235	474	241	506
South Atlantic.....	218	2 343	214	2 813	245	2 305	229	320	531	364
East South Central.....	116	487	127	517	143	423	127	382	75	558
West South Central.....	82	142	92	112	109	88	49	105	86	125
Mountain.....	259	357	207	322	250	261	172	460	267	305
Pacific.....	128	120	89	143	116	145	5 120	123	128	145

SMALLPOX CASE RATES

98 cities.....	6	2 16	5	2 17	2	2 23	4 4	18	4	20
New England.....	7	0	14	0	2	0	4 2	0	5	0
Middle Atlantic.....	0	0	0	0	6 0	2	0	0	0	0
East North Central.....	3	21	2	25	0	12	1	10	1	11
West North Central.....	13	77	11	84	9	151	11	84	13	128
South Atlantic.....	0	2 4	0	2 0	2	2 0	0	0	0	0
East South Central.....	23	29	6	18	7 0	29	6	12	29	23
West South Central.....	0	34	16	51	13	81	20	132	7	64
Mountain.....	34	9	9	0	0	44	17	0	0	9
Pacific.....	27	20	13	18	4	24	5 20	29	21	39

See footnotes at end of table.

Summary of weekly reports from cities, January 17 to February 20, 1932—Annual rate per 100,000 population, compared with rates for the corresponding period of 1931—Continued

TYPHOID FEVER CASE RATES

	Week ended—									
	Jan. 23, 1932	Jan. 24, 1931	Jan. 30, 1932	Jan. 31, 1931	Feb. 6, 1932	Feb. 7, 1931	Feb. 13, 1932	Feb. 14, 1931	Feb. 20, 1932	Feb. 21, 1931
98 cities.....	7	26	5	25	15	24	46	3	3	7
New England.....	2	2	2	5	2	2	12	2	0	5
Middle Atlantic.....	4	3	7	2	4	1	3	2	4	6
East North Central.....	3	3	1	1	4	2	2	1	3	3
West North Central.....	4	10	6	13	2	2	9	2	0	11
South Atlantic.....	29	14	16	18	4	18	16	0	10	22
East South Central.....	12	12	17	18	31	6	58	29	0	6
West South Central.....	23	27	3	14	23	24	3	14	3	14
Mountain.....	0	17	0	0	0	0	0	0	0	0
Pacific.....	11	6	2	10	4	0	13	10	2	4

INFLUENZA DEATH RATES

91 cities.....	12	52	13	70	13	61	18	59	20	50
New England.....	7	12	5	34	10	46	17	46	7	24
Middle Atlantic.....	8	91	9	102	8	68	13	49	13	40
East North Central.....	10	18	11	36	12	52	15	56	18	61
West North Central.....	6	29	3	29	12	35	26	56	49	74
South Atlantic.....	24	38	14	127	16	129	18	119	18	79
East South Central.....	44	64	50	76	41	64	44	64	25	76
West South Central.....	13	83	37	100	30	73	44	159	50	45
Mountain.....	26	44	52	52	52	52	60	17	78	17
Pacific.....	14	22	9	14	12	12	7	14	14	41

PNEUMONIA DEATH RATES

98 cities.....	120	229	109	259	119	231	134	218	154	212
New England.....	113	178	113	185	144	286	118	291	120	236
Middle Atlantic.....	126	332	111	369	103	293	124	254	162	217
East North Central.....	79	126	96	176	96	175	108	182	133	192
West North Central.....	154	171	113	159	160	136	244	124	285	218
South Atlantic.....	186	281	114	345	165	325	174	348	163	313
East South Central.....	107	299	125	229	157	178	182	166	144	274
West South Central.....	165	245	125	204	172	214	121	176	165	221
Mountain.....	147	157	138	200	215	209	172	183	198	191
Pacific.....	123	103	116	115	100	72	154	72	91	91

1 The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1932, and 1931, respectively.

2 Columbia, S. C., not included.

3 Trenton, N. J., and Covington, Ky., not included.

4 Barre, Vt., and San Francisco, Calif., not included.

5 Barre, Vt., not included.

6 Trenton, N. J., not included.

7 Covington, Ky., not included.

8 San Francisco, Calif., not included.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—Week ended February 13, 1932.—
The Department of Pensions and National Health of Canada reports cases of certain communicable diseases for the week ended February 13, 1932, as follows:

Province	Cerebrospinal fever	Influenza	Lethargic encephalitis	Poliomyelitis	Small-pox	Typhoid fever
Prince Edward Island ¹						
Nova Scotia		13				
New Brunswick ¹						
Quebec				3		6
Ontario	2	5	1		4	2
Manitoba				1		2
Saskatchewan ¹						3
Alberta						1
British Columbia					8	
Total	2	18	1	4	12	14

¹ No case of any disease included in the table was reported during the week.

*Ontario—Communicable diseases—Years 1931 and 1930.—*Certain communicable diseases were reported in the Province of Ontario, Canada, for the years 1931 and 1930, as follows:

Disease	1931		1930	
	Cases	Deaths	Cases	Deaths
Actinomycosis	1			
Cerebrospinal meningitis	70	25	120	48
Chancroid	10		26	1
Chicken pox	8,973		9,477	3
Conjunctivitis	5		1	
Diphtheria	2,368	107	3,198	130
Dysentery	24	13	10	28
Erysipelas	19		14	1
German measles	635		3,430	
Gonorrhoea	2,795		2,422	
Influenza	479	94	316	65
Jaundice	46			
Lethargic encephalitis	12	12	16	14
Malaria		1		
Measles	7,952	6	13,617	9
Mumps	5,034	2	2,311	
Paratyphoid fever	650	10	35	1
Pneumonia		1,441		1,796
Poliomyelitis	161	12	671	61
Puerperal fever	1	1	9	8
Scarlet fever	5,955	28	7,831	38
Septic sore throat	106	7	365	9
Smallpox	230		647	
Syphilis	2,114	11	2,223	4
Tetanus	3	4		6
Trachoma	3		2	
Trench mouth	15			
Tuberculosis	1,726	589	1,628	691
Tularaemia	7			
Typhoid fever	756	42	633	80
Undulant fever	143	1	75	1
Whooping cough	4,653	33	3,712	14

Quebec Province—Communicable diseases—Week ended February 13, 1932.—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the week ended February 13, 1932, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	68	Poliomyelitis.....	3
Diphtheria.....	36	Scarlet fever.....	75
Erysipelas.....	6	Tuberculosis.....	41
German measles.....	2	Typhoid fever.....	6
Measles.....	414	Whooping cough.....	43

Quebec Province—Vital statistics—December, 1931.—The Bureau of Health of the Province of Quebec, Canada, reports births, marriages, and deaths, with deaths from certain causes, for the month of December, 1931, as follows:

Estimated population.....	2,570,000	Deaths from—Continued.	
Births.....	6,362	Lethargic encephalitis.....	1
Birth rate per 1,000 population.....	24.9	Measles.....	9
Marriages.....	956	Nephritis.....	189
Deaths.....	2,710	Pneumonia.....	224
Death rate per 1,000 population.....	11.5	Poliomyelitis.....	7
Deaths under 1 year.....	648	Puerperal state.....	24
Deaths under 1 year per 1,000 births.....	101.9	Scarlet fever.....	16
Deaths from—		Syphilis.....	12
Cancer.....	207	Traffic.....	22
Cerebrospinal meningitis.....	1	Tuberculosis, pulmonary.....	191
Diabetes.....	31	Tuberculosis, other forms.....	49
Diarrrhea.....	141	Typhoid fever.....	23
Diphtheria.....	40	Violence.....	60
Heart disease.....	330	Whooping cough.....	15
Influenza.....	56		

Quebec Province—Vital statistics—Years 1931, 1930, and 1929.—The Bureau of Health of the Province of Quebec, Canada, reports births, deaths, and marriages, with birth and death rates, for the years 1931, 1930, and 1929, as follows:

	1931	1930	1929
Births.....	63,451	63,625	61,390
Birth rate.....	26.1	26.7	26.4
Marriages.....	16,790	18,543	19,610
Deaths.....	34,487	35,945	37,221
Death rate.....	12.0	12.8	13.5
Deaths under 1 year.....	9,482	10,045	9,810
Deaths under 1 year per 1,000 births.....	112.6	120.1	120.5

The following table shows the number of deaths from certain causes in Quebec Province for the three years, together with the death rates per 100,000 population for these causes.

Cause of death	Number of deaths	Death rate per 100,000 population	Cause of death	Number of deaths	Death rate per 100,000 population
Tuberculosis:			Heart disease:		
1931.....	3, 047	106. 2	1931.....	3, 507	122. 2
1930.....	3, 350	118. 8	1930.....	3, 388	120. 2
1929.....	3, 286	118. 7	1929.....	3, 286	118. 7
Cancer:			Violence:		
1931.....	2, 375	82. 8	1931.....	1, 582	55. 1
1930.....	2, 346	83. 2	1930.....	1, 652	59. 0
1929.....	2, 131	77. 0	1929.....	1, 542	55. 7

ITALY

Communicable diseases—Four weeks ended August 23, 1931.—During the four weeks ended August 23, 1931, certain communicable diseases were reported in Italy, as follows:

Disease	July 27-Aug. 2		Aug. 3-9		Aug. 10-16		Aug. 17-23	
	Cases	Com-munes affected	Cases	Com-munes affected	Cases	Com-munes affected	Cases	Com-munes affected
Anthrax.....	41	36	75	57	68	48	60	48
Cerebrospinal meningitis.....	2	2	4	4	4	4	3	3
Chicken pox.....	54	35	61	41	48	37	48	83
Diphtheria and croup.....	356	214	364	216	309	190	284	179
Dysentery.....	70	30	58	27	62	31	65	22
Lethargic encephalitis.....	3	3	3	3			1	1
Measles.....	503	173	629	188	439	142	331	128
Poliomyelitis.....	20	9	27	21	16	15	33	18
Scarlet fever.....	257	113	320	120	220	99	201	101
Typhoid fever.....	1, 133	537	1, 176	540	983	521	952	505
Typhus fever.....							1	1

SWEDEN

Malmö—Smallpox.—According to information dated February 12, 1932, there was a small epidemic of smallpox in Malmö, Sweden. The first case, which was infected while returning to Sweden from a foreign country, was observed early in January, and 11 cases had occurred up to January 28. Vaccination was being carried on on a large scale, effort being made particularly to vaccinate all those persons who had had contact with the patients. No new cases had been reported since February 1.

TRINIDAD

Port of Spain—Vital statistics—January, 1931 and 1932.—The following statistics for the months of January, 1931 and 1932, are taken from a report issued by the public health department of Port of Spain, Trinidad.

	January, 1931	January, 1932
Number of births.....	175	168
Birth rate per 1,000 population.....	30. 6	28. 2
Number of deaths.....	94	106
Death rate per 1,000 population.....	16. 4	17. 8
Deaths under 1 year.....	14	22
Deaths under 1 year per 1,000 births.....	80. 0	130. 9

Place	July, 1931	August, 1931	September, 1931	October, 1931	November, 1931	December, 1931	January, 1932	Place	July, 1931	August, 1931	September, 1931	October, 1931	November, 1931	December, 1931	January, 1932
British East Africa (see also table above): Kenya.....	484	235	14	64	44	41	5	Peru—Continued.							
Ecuador: Province—								Lambayeque.....			1	1			
Chimborazo.....			13	2	8		8	Libertad.....	C				2		
Lola.....	1		4	11	2		11	Lima.....	C				9		6
Indo-China.....	1		4	3		9	16	Plague-infected rats.	D				4		
Madagascar (see also table above):			4	1		6	9	Lima.....	C			1			
Ambositra Province.....	1	2	1	8	39			Plaza.....	C				1		
Antsirabe Province.....	13	1	1	5	37			Senegal:	D						
Maevatanana Province.....	12	22	19	17	27			Beol ¹	C	27	101	13	6	2	
Miarinarivo Province.....					4			Dakar ¹	D	13	58	8	2		
Moramanga Province.....	8	20	14	18	10			Dourbel ¹	D	95	194	45	4		
Tananarive Province.....	7	19	12	16	9			Louga ¹	D	73	106	31	4		
Peru.....	1	3	12	13	25			Rufisque ¹	D			13		10	
Cajamarcas.....	5	45	65	120	189			Thies ¹	D	3	2	5	5	5	
	3	44	63	117	178			Tiavaouane ¹	D	1	1	4	2	10	
	2	19	2	8	11		11			84	2	1	7	12	2
		14		7							26	12	7	16	1
							3				16	8	5	7	1
											7	16	8	5	
											3	8	5	7	
											2	2	7	16	1

¹ Reports incomplete.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place	July, 1931	August, 1931	September, 1931	October, 1931	November, 1931	December, 1931	January, 1932
Chosen: Seoul.....	C 1	33	12	24	4		
.....	D 1	6	1	1	1		
Czechoslovakia.....	C			18			
.....	D			1			
Greece.....	C 2	13	9	12	4		
.....	D	2	1				
Guatemala.....	C 34	3					
.....	D 6						
Lithuania.....	C						
.....	D						
Turkey.....	C						
.....	D						
Venezuela: Caracas.....	C						
.....	D						
Yugoslavia.....	C						
.....	D						

YELLOW FEVER

Place	Week ended—											
	June, 1931			July, 1931			August, 1931			September, 1931		
	28-30	July 1-3	4-6	28-30	July 1-3	4-6	28-30	Sept. 1-3	4-6	28-30	Sept. 1-3	4-6
Brazil:												
Alagoas State.....	C			C			C			C		
.....	D			D			D			D		
Maceio.....	C			C			C			C		
.....	D			D			D			D		
Utinga.....	C			C			C			C		
.....	D			D			D			D		
Ceara State.....	C			C			C			C		
.....	D			D			D			D		
Sobral.....	C			C			C			C		
.....	D			D			D			D		
Pernambuco State.....	C			C			C			C		
.....	D			D			D			D		
Pau d'Alho.....	C			C			C			C		
.....	D			D			D			D		

